AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims

Claims 1-69 (canceled)

70. (currently amended) A method for determining likelihood of a match between a first set of data having Y of N bits set equal to a first binary value and a remainder of the bits set equal to a second binary value, and a second set of data also having Y of N bits set equal to a first binary value and a remainder of the bits set equal to a second binary value, the method comprising:

determining the general probabilities of Y of N bits in said first set of data and in said second set of data being the same, where Y and N are integers and $N \ge Y \ge 1$; and

heuristically processing the <u>general</u> probabilities to produce a series of match values based on the number of respective bits in the first set of data and in the second set of data that are identical.

71. (currently amended) The method of claim 70, wherein said heuristically processing comprises:

assigning a match of n out of Y values a value of 1, where n is an integer and n \leq

normalizing remaining values to the value of 1 to produce resulting numbers; multiplying the resulting numbers by a constant to produce multiplied numbers;

subtracting the multiplied numbers from 1 to produce the series of match values.

Y;

and

72. (previously presented) The method of claim 71, further comprising setting match values greater than a predetermined value to values substantially equal to 1.